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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974,046	10/11/2001	Satoshi Shinada	Q66672	7606

7590 02/19/2004

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Washington, DC 20037-3213

EXAMINER
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NGHIEM, MICHAEL P

ART UNIT	PAPER NUMBER
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2863

DATE MAILED: 02/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/974,046

Applicant(s)

SHINADA, SATOSHI

Examiner

Michael P Nghiem

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-16, 19, 21-23 and 25-48 is/are allowed.
- 6) ☒ Claim(s) 17, 20, 49 and 50 is/are rejected.
- 7) ☒ Claim(s) 18 and 24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

The Amendment filed on December 29, 2003 has been acknowledged.

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17, 20, 49, and 50 are rejected under 35 U.S.C. 102(b) as being anticipated by Helterline et al. (US 6,039,430).

Regarding claims 17, 20, 49, and 50, Helterline et al. discloses an ink cartridge (18) for an inkjet printer (Fig. 1), wherein the ink cartridge is one of ink cartridges (18's, Fig. 1) that are detachably attached to a cartridge accommodating portion (24) of the inkjet printer as aligned in parallel (Fig. 1), wherein said ink cartridge comprises a contact (40) that contacts one of connecting members (42) formed in the cartridge accommodating portion (Fig. 2a) when said ink cartridge is attached to the cartridge accommodating portion (Fig. 2a), and wherein said contact is located offset from the middle of said ink cartridge in an aligning direction of the ink cartridges (40 is on outer surface of 18,

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notice that the surface is not depicted by broken lines, Figs. 2a, 2b), said aligning direction being a direction in which the ink cartridges are aligned with each other (Fig. 1),

- wherein said contact of is contained on an outside surface of said ink cartridge (Fig. 2's), said outside surface facing away from all other surfaces of said ink cartridge (Figs. 2's), and

- wherein the outside surface of said ink cartridge is substantially parallel to an insertion direction in which said ink cartridge is inserted into said cartridge accommodating portion (vertical direction of surface containing 40, Fig. 2's).

Regarding claims 49 and 50, Helterline et al. further discloses a plurality of connecting members (42's, one 42 per 18, Figs. 1, 2's), wherein a first ink cartridge (leftmost 18, Fig. 1) has a first contact and a second ink cartridge, adjacent to said first ink cartridge (cartridge 18 next to first cartridge), has a second contact (each cartridge 18 has a contact 40), such that no contacts exist between said first contact and said second contact (note spaces between 18's, Fig. 1), wherein a third ink cartridge (cartridge 18 next to second cartridge) has a third contact and a fourth ink cartridge (rightmost 18, Fig. 1), adjacent to said third ink cartridge, has a fourth contact (each cartridge 18 has a contact 40), such that no contacts exist between said third contact and said fourth contact (note spacing between 18's).

Regarding claim 49, Helterline et al. further discloses that a distance between said first contact and said second contact is different than a distance between said third contact and said fourth contact (spacing between first and second cartridges is greater than spacing between third and fourth cartridges, Fig. 1).

Regarding claim 50, Helterline et al. further discloses that a distance between said first contact and said second contact is different than a distance between said second contact and said third contact (spacing between first and second cartridges is greater than spacing between second and third cartridges, Fig. 1).

### ***Allowable Subject Matter***

2. Claims 18 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

3. Claims 1-16, 19, 21-23, and 25-48 are allowed.

### ***Reasons For Allowance***

4. The combination as claimed wherein an ink cartridge including matching sets shaped and located such that a fitting structure between one pair of

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adjacent ink cartridges and a fitting structure between another pair of adjacent ink cartridges are different in form (claims 1, 3, 6, 19) or each matching set is formed only between predetermined two adjacent ink cartridges such that the ink cartridges are connected together as aligned in a predetermined order and the ink cartridges respectively comprise ink supply ports, wherein the cartridge accommodating portion comprises ink supply needles (claim 10) or both of the contacts of a first pair of adjacent ink cartridges contact a first one of the connecting members (claims 18, 39) or the size of the second engaging portion is substantially different than the size of the third engaging portion (claims 25, 28) or the side surface of said ink cartridge is substantially parallel to the aligning direction of the ink cartridges (claims 37, 38, 47, 48) or said contact is contained on a side surface of said ink cartridge such that said contact and a contact of an adjacent ink cartridge are located in a single plane when the ink cartridges are attached to the cartridge accommodating portion (claims 43, 44, 45, 46) is not disclosed, suggested, or made obvious by the prior art of record.

### ***Response to Arguments***

5. Applicant's arguments filed on December 29, 2003 have been considered but are not persuasive.

With respect to the 35 USC 102 rejections, Applicants argue that the prior art fails to disclose the surface of the ink cartridge as facing away from all other surfaces of said ink cartridge".

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Examiner's position is that Helterline discloses a surface (surface supporting 38, 40) that faces away from all other surfaces of said ink cartridge (Figs. 2a, 2b).

New claims 49 and 50 have been addressed above.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

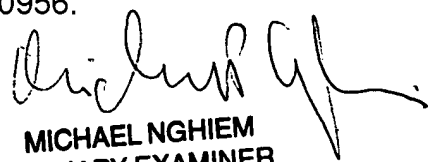
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

**Contact Information**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (571) 272-2272. The examiner can normally be reached on M-H from 6:30AM – 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached at (571) 272-2269. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



**MICHAEL NGHIEM**  
**PRIMARY EXAMINER**

Michael Nghiem

February 12, 2004